Cellular Immunology

AN INTERNATIONAL JOURNAL

EDITOR-IN-CHIEF: H. Sherwood Lawrence

Volume 50, 1980

ACADEMIC PRESS

A Subsidiary of Harcourt Brace Jovanovich, Publishers

New York London Toronto Sydney San Francisco

Copyright © 1980 by Academic Press, Inc.
All Rights Reserved

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the copyright owner.

The appearance of the code at the bottom of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per copy fee through the Copyright Clearance Center, Inc. (Operations Staff, P.O. Box 765, Schenectady, New York 12301) for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. Copy fees for pre-1980 articles are the same as those shown for current articles.

MADE IN THE UNITED STATES OF AMERICA

Contents of Volume 50

NUMBER 1, MARCH 1, 1980

FRANK J. WAXMAN, DAVID J. HINRICHS, PAUL H. MAURER, AND PETER BARAM. Genetic Control of Lymphokine Production as Assessed by Macrophage Migration Inhibition and Lymphocyte Proliferation 1

DAVID S. GORDON AND STEVEN L. SHORE. Antibody-Dependent Cellular Cytotoxicity to Virus-Infected Target Cells: Role of Nylon Wool-Adherent T Cells as Effectors 19

MONTE V. HOBBS AND T. L. FELDBUSH. Antigen Modulation of the Immune Response. VI. Rate of Large Memory Cell Appearance in Lymph Nodes and Thoracic Duct Lymph 30

FRANCES P. NOONAN AND W. J. HALLIDAY. Genetic Restriction of the Serum Factor Mediating Tolerance in Trinitrochlorobenzene Hypersensitivity 41

DAVID TARTOF. Inhibition of Cytotoxic T Lymphocytes with Concanavalin A 48

L. JANE MCNEILAGE AND BARBARA F. HESLOP. Lymphocyte Homing in Syngeneic and Unsensitized MHC Compatible Allogeneic Hosts. I. Evidence for Both Syngeneic Self-Recognition and Early Killing of Allogeneic Cells 58

JOOST J. OPPENHEIM, ATSUSHI TOGAWA, LOUIS CHEDID, AND STEVEN MIZEL. Components of Mycobacteria and Muramyl Dipeptide with Adjuvant Activity Induce Lymphocyte Activating Factor 71

THOMAS J. ROGERS, IRENE NOWOWIEJSKI, AND DAVID R. WEBB. Partial Characterization of a Prostaglandin-Induced Suppressor Factor 82

P. RALPH AND I. NAKOINZ. Environmental and Chemical Dissociation of Antibody-Dependent Phagocytosis from Lysis Mediated by Macrophages: Stimulation of Lysis by Sulfhydryl-Blocking and Esterase-Inhibiting Agents and Depression by Trypan Blue and Trypsin 94

OLUSOLA ALABA, IRWIN D. BERNSTEIN, PETER W. WRIGHT, AND KARL ERIK HELLSTRÖM. Potentiation of the *in Vitro* Cytotoxic Response to Syngeneic Lymphoma Cells by Soluble Products of Tuberculin-Sensitive Lymphoid Cells Stimulated with PPD 106

JULIUSZ PRYJMA, JOSE MUÑOZ, GABRIEL VIRELLA, AND H. HUGH FUDENBERG. Evaluation of IgM, IgG, IgA, IgD, and IgE Secretion by Human Peripheral Blood Lymphocytes in Cultures Stimulated with Pokeweed Mitogen and *Staphylococcus aureus* Cowan I 115

K. H. STENZEL, A. L. RUBIN, AND A. NOVOGRODSKY. Galactosyl-Binding Lectins: Potentiation of Mitogenicity by Erythrocyte Membrane Fragments 125

EUGENIA HAWRYLKO. Induction of Delayed-Type Hypersensitivity and Antitumor Immunity by Systemic BCG 136

MELODYE W. CAMPBELL, MILTON M. SHOLLEY, AND GLENN A. MILLER. Macrophage Heterogeneity in Tumor Resistance: Cytostatic and Cytotoxic Activity of Corynebacterium Parvum-Activated and Proteose Peptone-Elicited Rat Macrophages against Moloney Sarcoma Tumor Cells 153

MALCOLM B. C. DUNLOP, HERBERT C. MORSE III, AND RALPH J. GRAFF. The Cytotoxic T-Cell Response to H-1 Minor Histocompatibility Antigen Differences 169

SPENCER H. S. LEE AND LOIS B. EPSTEIN. Reversible Inhibition by Interferon of the Maturation of Human Peripheral Blood Monocytes to Macrophages 177

SHORT COMMUNICATIONS

LOIS B. EPSTEIN, SPENCER H. S. LEE, AND CHARLES J. EPSTEIN. Enhanced Sensitivity of Trisomy 21 Monocytes to the Maturation-Inhibiting Effect of Interferon 191

SUDHIR GUPTA, BIJAN SAFAI, RICHARD EDELSON, DELPHINE PARROTT, AND ROBERT GOOD. Locomotion of T Cells from Patients with Cutaneous T-Cell Lymphoma (Sezary Syndrome and Mycosis Fungoides) 195

D. C. LAUX AND D. J. DAVIGNON. Studies on the *in Vivo* Induction and Suppression of Direct and Lectin-Dependent, Cell-Mediated Cytotoxicity 202

PATRICK G. HOLT. Alveolar Macrophages. IV. Interspecies Differences in Activity in Proliferating Lymphocyte Cultures 210

J. KETTMAN AND S. BEN-SASSON. Immune Response of Guinea Pig Lymphoid Cells *in Vitro*.

III. Induction by Concanavalin A of a Secondary Anti-TNP Response in Primed Guinea Pig Cells 216
Jochen Abb, Hannelore Abb, and Friedrich Deinhardt. Microcultures of Marmoset Lymphocytes. I. Response to Mitogens 224
Masahiro Yamamoto, Neal A. Takai, and Basil Rapoport. Time-Dependent Loss of Prostaglandin E Release by Adherent Cells in Response to Stimulation by Thyroid Cells: Prevention of This Loss by Phytohemagglutinin 231

Announcements 236

Papers to Appear in Forthcoming Issues 238

Number 2, March 15, 1980

Arthur D. Bankhurst, Dennis Maki, and Leroy C. McLaren. Binding Sites for Measles Virus Antigens on Human B and T Lymphocytes 243
Maria C. Michaelides and Ernest S. Simms. Immune Responses in Mice Infected with Lactic Dehydrogenase Virus. III. Antibody Response to a T-Dependent and a T-Independent Antigen during Acute and Chronic LDV Infection 253
P. Truffa-Bachi and G. R. Bordenave. A Reverse Hemolytic Plaque Assay for the Detection and the Enumeration of Immunoglobulin Allotype-Secreting Cells 261
W. S. Lapp, M. Mendes, H. Kirchner, and D. Gemsa. Prostaglandin Synthesis by Lymphoid Tissue of Mice Experiencing a Graft-versus-Host Reaction: Relationship to Immunosuppression 271
Russell W. Steele. Transfer Factor and Cellular Reactivity to Varicella-Zoster Antigen in Childhood Leukemia 282
S. Chatterjee-Hasrouni, V. Santer, and P. K. Lala. Characterization of Maternal Small Lymphocyte Subsets during Allogeneic Pregnancy in the Mouse 290
David T. Y. Yu, Nicholas Chiorazzi, and Henry G. Kunkel. Helper Factors Derived from Autologous Mixed Lymphocyte Cultures 305
Shlomo Ben-Efraim, Chava Sarir, Ora Dar, Gita Barbash, Norman Grover, and David W. Weiss. Effects of the MER Tubercle Bacillus Fraction on the Production of Antibodies *in Vitro* 314
Somei Kojima, Takako Kamijo, and Zoltan Ovary. Nonspecific Enhancement of Mouse Antihapten IgE Antibody Response: Involvement of a T-Cell Subpopulation and Its Product for the Potentiation 327
Annette Muckerheide, Amadeo J. Pesce, and J. Gabriel Michael. Kinetics of Immunosuppression Induced by Peptic Fragments of Bovine Serum Albumin 340
Dean D. Manning. *In Vivo* Immune Stimulation of Mice by Anti-μ Antibodies: Generation of High Serum Levels of a Low Molecular Weight IgM Product 348
Yoshinobu Nakao, Michizo Kishihara, Yasuto Baba, Takuo Fujita, and Kiyoshi Fujiwara. Mitogenic Response of Human and Murine T Lymphocytes to Staphylococcal Protein A: Not Mediated by Binding to Cell Surface Immunoglobulins 361
Hiroshi Yamamoto and David H. Katz. Biological Effects of Anti-Idiotypic Antibodies on Lymphocyte Function. I. Analysis of the Effects on B Lymphocytes of Combining Site and Framework-Directed Anti-T-15 Idiotypic Antibodies 369
Manikkam Suthanthiran, Kurt H. Stenzel, Albert L. Rubin, and Abraham Novogrodsky. Augmentation of Proliferation and Generation of Specific Cytotoxic Cells in Human Mixed Lymphocyte Culture Reactions by Colchicine 379
K. H. Brooks, T. L. Feldbush, and A. van der Hoven. The Generation of Memory B-Cell Subpopulations Capable of Proliferation and Expansion of the Pool: Effect of Time and Antigen 392
J. M. D. Galama, José Ubels-Postma, Annemieke Vos, and C. J. Lucas. Measles Virus Inhibits Acquisition of Lymphocyte Functions but Not Established Effector Functions ... 405
Randolph J. Noelle and David A. Lawrence. Modulation of T-Cell Functions. I. Effect of 2-Mercaptoethanol and Macrophages on T-Cell Proliferation 416
Charles E. Moody, Gregory W. Siskind, and Marc E. Weksler. Cell-Type Restriction in Tolerance Induced by Hapten-Modified Cells 432

Short Communications

Naomi Galili, Uri Galili, Eva Klein, Lili Rosenthal, and Bo Nordenskjöld. Human T Lymphocytes Become Glucocorticoid-Sensitive upon Immune Activation .. 440

Edward L. Morgan, John M. Fidler, and William O. Weigle. The Inability of CBA/N Mice to Proliferate in Response to Fc Fragments from Human Immunoglobulin Is an Age-Related Defect 445

Domenico Mancino, Stephen P. Lerman, Naohiro Watanabe, Nakami Hirayama, Stephen S. Caiazza, Judith Levinson, and Zoltan Ovary. Inhibition of Antibody Production by Irradiated Reticulum Cell Sarcoma Cells in SJL Mice 451

Papers to Appear in Forthcoming Issues 455

Author Index for Volume 50 459

The Subject Index for Volume 50 will appear in the December 1980 issue as part of a cumulative index for the year 1980.